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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/806,502

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Marian Rudolf

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VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA, SUITE 1600
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER

PEREZ, JULIO R

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/806,502	Applicant(s) RUDOLF ET AL.	
	Examiner Julio R. Perez	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/30/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 5, 8, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cha et al. (2004/0090934) in view of Wiberg et al. (US 20030210660).

Regarding claims 1, 5, Cha discloses a wireless multi-cell communication system including a radio network controller (RNC) in communication with a plurality of base stations (Fig. 1, #'s 22b, 20a-20c), a method of providing high speed downlink packet access (HSDPA) services, the method comprising: the RNC sending a control signal to at least one of the base stations (par. 27, lines 14-18 teach the controller communicating an initial allocation of power to the base station, which read on sending a control signal to at least one base station"), the at least one base station having a plurality timeslots assigned thereto for the establishment of HSDPA channels (par. 27, teaches dedicated voice channels and HSDPA supported by the base stations, which read on one base station having a plurality timeslots (i.e., channels) assigned, the control signal indicating a maximum allowed HSDPA transmit power for each of the timeslots (pars. 27-29, the transmit power distribution of the base station's transmit power is determined for the services offered); and the at least one base station sending a feedback signal to the RNC (pars. 27-29. Note further that par. 29, lines 4, teaches

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the base station sending a corresponding signal to station controller, corresponding to the monitored demand for the dedicated voice channels and HSDPA services), the feedback signal indicating the results of measurements of the power of the transmitted HSDPA timeslots during a predetermined time period (pars. 27, 29, 39. Par. 29, lines 6-11 further teaches the signal including resource measurements information for the dedicated voice channels, which read on "the feedback signal indicating the results of measurements of power". Note that par. 39, lines 2-5 teach initiation of the measurement step triggered as time passes (e.g., the measurement step being periodic), which reads on "during a predetermined time period".

With further regard to claim 5, Cha discloses a RNC and a plurality of base stations in communications with the RNC (Figure 1, #'s 20a-20c, 22a-22b).

What Cha does not explicitly disclose is signal indicating different maximum allowed transmit power values for different timeslots of particular base station.

Wiberg teaches power control transmission using total power allocated for all channels (par. 12, lines 11-17; par. 21; par. 40, lines 11-21; par. 41).

It would have been obvious to one skilled in the art at the time of the invention to modify Cha, such that providing the maximum amount of power to timeslot on the cell, to provide proper allocation for optimal performance of the channel and avoid wasting resources.

Regarding claims 4, 8, the combination of Cha and Wiberg discloses the maximum allowed HSDPA transmit power for one timeslot of one cell is different than the maximum allowed HSDPA transmit power for the same timeslot in a different cell

(pars. 18-19, teach status signals transmitted to effectuate a change in the base station's resource allocation in response to fluctuations in the demand for services offered, which read on maximum allowed HSPA transmit power for one slot being different from the other timeslot in a different cell).

3. Claims 9-10, 12-15, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cha et al. (2004/0090934) in view of Malkamaki (US 20040097253A1) and Wiberg.

Regarding claims 9, 14, Cha discloses a wireless multi-cell communication system including a radio network controller (Figure 1, # 22a) in communication with a plurality of base stations (Figure 1, #'s 20a-20c), a method of providing high speed downlink packet access (HSDPA) services, the method comprising: the RNC sending a control signal to at least one of the base stations (par. 27, lines 14-18 teach the controller communicating an initial allocation of power to the base station, which read on sending a control signal to at least one base station"), the control signal indicating a maximum allowed HSDPA transmit power (pars. 27-29, the transmit power distribution of the base station's transmit power is determined for the services offered); and the at least one base station sending a feedback signal to the RNC (pars. 27-29. Note further that par. 29, lines 4, teaches the base station sending a corresponding signal to station controller, corresponding to the monitored demand for the dedicated voice channels and HSDPA services), the feedback signal indicating the results of measurements of the power of the transmitted HSDPA timeslots during a predetermined time period.

What Cha does not specifically disclose is that the method in the multi-cell communication system is established within a frequency division duplex cell having sets of transmission timing intervals. However, Malkamaki teaches these limitations (pars. 39, 41, 61, 67, 71).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Cha to include Malkamaki, as it is known to implement wireless communication systems with FDD mode and TTIs to define periods for data transportation between the user equipment and base stations.

With further regard to claim 14, Cha discloses a RNC and a plurality of base stations in communications with the RNC (Figure 1, #'s 20a-20c, 22a-22b).

Cha in view of Malkamaki does not explicitly disclose a signal indicating different maximum allowed transmit power values for different timeslots of particular base station.

Wiberg teaches power control transmission using total power allocated for all channels (par. 12, lines 11-17; par. 21; par. 40, lines 11-21; par. 41).

It would have been obvious to one skilled in the art at the time of the invention to modify Cha and Malkamaki, such that providing the maximum amount of power to timeslot on the cell, to provide proper allocation for optimal performance of the channel and avoid wasting resources.

Regarding claims 10, 15, the combination discloses different respective ones of the frames are allocated different maximum allowed HSDPA transmit power settings (Cha, pars. 18-19, teach status signals transmitted to effectuate a change in the base

station's resource allocation in response to fluctuations in the demand for services offered, which read on maximum allowed HSPA transmit power for one slot being different from the other timeslot in a different cell).

Regarding claims 12, 13, 17, 18, the combination discloses the RNC is configured to disable particular one of the TTIs and particular TTIs (Malkamaki, pars. 61, 67, 71).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 3, 6, 7, 11, 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cha and Wiberg in view of Wang et al. (US 20050117553A1).

Regarding claims 2, 6, 11, 16, the combination of Cha and Wiberg teaches claim 1, but it is silent on wherein the predetermined time period is at least 100 ms.

Wang teaches "TDMA frame having a duration of 10 ms per timeslot and, which subdivided into fifteen time slots", that includes at least 10 slots (i.e., 10x10 ms), (par. 42, lines 17-20), which reads on a predetermined time period of at least 100 ms.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Cha to include Wang, as it is known to implement wireless communication systems with time periods during provision of timeslots for data transportation.

6. Claims 3,7, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cha and Wiberg in view of Wang et al. (US 20050117553A1).

Further in regard to claims 3, 7, Wang discloses the wireless multi-cell communication system is a time division duplex (TDD) system in which the RNC allocates a certain number of timeslots for the usage of HSDPA data channels (HS-DSCHs) to each cell (pars. 29-30).

Response to Arguments

7. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R. Perez whose telephone number is (571) 272-7846. The examiner can normally be reached on 10:30 - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William G. Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Julio R Perez
Examiner
Art Unit 2617

9/25/07

JP



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600